

four years, 10·939 the mean range of the neap-tides; 15' 43"·76 and 16' 1"·82 the mean semidiameters of the Moon and Sun respectively at the spring-tides, 15' 30" and 16' 1"·82 the mean semidiameters at the neap-tides; x is the density of the Moon, that of the Sun being taken = 1; the equation gives $x = 2·218$ leading to the value, Moon's mass = $\frac{1}{87·925}$ of the Earth's mass. The values obtained by effecting the determination in the same manner for each of the four years separately are $\frac{1}{89·870}$, $\frac{1}{88·243}$, $\frac{1}{87·943}$, and $\frac{1}{86·000}$ of the Earth's mass.

Errata in Logarithmic Tables of 1849.

By Major-General Shortrede.

In the log. of cub. in. dist. water in grains there is in some copies an obvious error. I have a copy properly corrected, and by some mistake it has been made wrong again.

The following list of Errata in the Log. Tables of 1849 is supplementary to the one given in the January number of 1864, page 68, vol. xxiv. They were omitted to be given along with the others owing to the copy in which they were noted having been mislaid, and out of reach; the unauthorised issue in 1844 contains several others.

Preface p. viii	line	Δ_7 for	20200	read	20160	∇_8		
	xvi	16	9426		9428			
		18	1670		1672		For.	Read.
		19	7182		7184		& in log	8833
					P_1			
					p_1		4211	4215
In Tables 31	in log	24451	2996		2966			
	50 Diff. & Mult.	91×8	729		728			
Logs	36 log	54033	6541		6591		This correction has been recently communicated by M. Leverrier through the Astronomer Royal.	
	67	67951	1959		1958			
	81	85071	6815		7815			
Antilogs	146	41799	8124		8123		These and the great majority of the errors in the Antilogs formerly noted were communicated by Mr. Gray.	
	178	79689	4512		4552			
	184	86588	3119		3109			
	188	92052	7683		7603			

In the formulæ for Spherical Triangles

Case			
598 2 sides	Sought		
& \angle opp.	C	for	$\cot \xi$ read $\cos \xi$
	c	$\frac{\cos b \cos \phi}{\cos b}$	$\frac{\cos a \cos \phi}{\cos b}$

Capt. Noble, Occultation of Mercury by the Moon. 273

In the Table of Constants

R°	last 5 fig	for 25025	82320	8	{ from an error of 1 in the summation.
Sin 1°	7	17275 54	37283	51	
Log Sin 1°	4	1831	2286		{ These were detected by Capt. Jacob.
Sin 1"	2	68	76	3677	
tan 1"	7	15233 63	1334	436	
Sin 18	2	675 4	575 4		
Sin 1 ⁱ		after 01570 insert 796			

The correction of the error on page 205 in log (1.2.3...20) for 642 read 442 is incomplete; the proper correction is, *for* 642 read 462—the figures being transposed.

Additional Remarks on the Solar Eclipse of Nov. 6, 1867.

By A. Brothers, Esq.

In my letter of March 7 I said that the image of the Sun was “remarkably *steady*” during the whole time of the eclipse. The word was printed “*shady*,” and consequently the meaning of the sentence was destroyed.

The state of the atmosphere is referred to in most of the notices of the late eclipse as being the reverse of what it was here. In this fact will perhaps be found the explanation that the irregularities of the Moon’s limb were not seen by some observers, while others saw them distinctly. My attention was chiefly devoted to photographic experiments, but I saw sufficient to enable me to say that the rough outline of the Moon was distinctly seen. There was a small spot on the Sun not far from the centre of the disk, and it was so distinct that I have been surprised to read that observers with far larger instruments than my own report the entire absence of any spot.

Manchester,
6th May, 1867.

Occultation of Mercury by the Moon. By Capt. W. Noble.

The planet was wretchedly defined, the sky was hazy, and the sunlight bright. *Mercury* seemed to fade away gradually. He finally seemed to disappear absolutely at

$$1^h 34^m 28^s \text{ L.S.T.} = 22^h 54^m 55^s \text{ L.M.T.}$$

B